

in A. DC. Prod. ix. 48 (1845). *Sabbatia* subg. *Plurimaria* Raf. l. c. in part.
Pleienta Raf. l. c. in part.

21. *S. gentianoides* Ell.

22. *S. capitata* (Raf.) Blake.

LONDON, ENGLAND.

EXPLANATION OF PLATE 112.

Fig. A. *Sabatia difformis* (L.) Druce. 1. Type, $\frac{1}{2}$ nat. size. 2. Flower, about $1\frac{1}{2}$ nat. size. (British Museum.)

Fig. B. *S. campanulata* (L.) Britton. Type, $\frac{1}{2}$ nat. size. (Linnaean Herbarium.)

Fig. C. *S. obtusata* Blake. 1. Type, $\frac{1}{2}$ nat. size. 2. Calyx, about $1\frac{1}{2}$ nat. size. (British Museum.)

CAREX TUCKERMANI NIAGARENSIS; A NEGLECTED SEDGE.

C. P. SMITH.

WHILE in Niagara county, New York, in the summer of 1911, I collected a variety of *Carex* which is not, at least to my satisfaction, accounted for in our present-day floras. Every effort to determine the form led to *C. Tuckermani* Dewey; but from that species, as illustrated and described, this plant differs in certain apparent characters. Accordingly, after referring to the original description and illustration, and examining the material in the *C. Tuckermani* covers of the Cornell University and the U. S. National Herbaria, I have decided to make record of the plant as follows:

CAREX TUCKERMANI niagarensis var. nov. a forma typica differt culmis late patentibus; spicis nutantibus, deorsum floribus plus minusve laxis; perigyniis latissime ovoideis vel deltoideis, basi plerumque obliquis planisque.

Differs from the typical form in its widely spreading culms, nodding spikes with flowers more or less scattered below, triangular-ovoid, deltoid, or even rhomboidal perigynia with the base commonly oblique or truncate.

My No. 2438, 27 August, 1911, Youngstown, N. Y., is taken as the type collection. No. 2554 is also typical, being from "West Hill," Ithaca, N. Y., 28 June, 1912, matured akenes having been subsequently

secured on July 22. Various other herbarium specimens indicate frequent occurrence of this variety in Western New York, and its general distribution must be more or less the same as that of the species, if I am justified in crediting to var *niagarensis* the U. S. National Herbarium sheets numbered and labeled as follows:

- 30410 — H. P. Sartwell, Penn Yan, N. Y.
 295054 — F. V. Coville, 10 June 1884, Oxford, N. Y.
 134251 — L. F. Ward, August 1879, Indian River, N. Y.
 242817 — A. P. Garber, 25 July 1868, Greenville, Mercer county, Pa.
 239176 — J. Fowler, 16 August 1881, Sharhott Lake, Ont.
 605631 — J. Fowler, 26 July 1902, Plevna, Ont.
 30407 — F. F. Wood, 28 June 1889, bank of Bad River, Wis.
 30602 — F. F. Wood, 13 August 1891, Barron, Wis.
 131962 — M. S. Bebb, 1870, Fountain, Ill.
 30408 — C. A. Ballard, July 1893, Lake Kilpatrick, Minn.

Pressed young material can evidently not be determined, as many June, and even some July, collections do not seem to have the perigynia matured enough to show determinative characters after being pressed; e. g., of three sheets of Sartwell's specimens in the National Herbarium, I care to cite only one as showing evidence of representing the variety I describe. The original illustration of Dewey's seems to have been made from very young material and can easily confuse one in trying to study the species in its matured forms.



Fig. 1. Spike of *C. Tuckermani niagarensis*. $\times \frac{3}{2}$.

My only collection which I am willing to call typical *C. Tuckermani* was found in a water-shed bog a short distance north of Summit Marsh, North Spencer, Tioga county, N. Y., and is my No. 2583,

6 Aug., 1912. A normal perigynium from this collection is represented at "c" in the figures herewith. An occasional perigynium of these specimens approaches the deltoid shape, however.

The species is designated as a plant of "wet meadows" (Dewey),

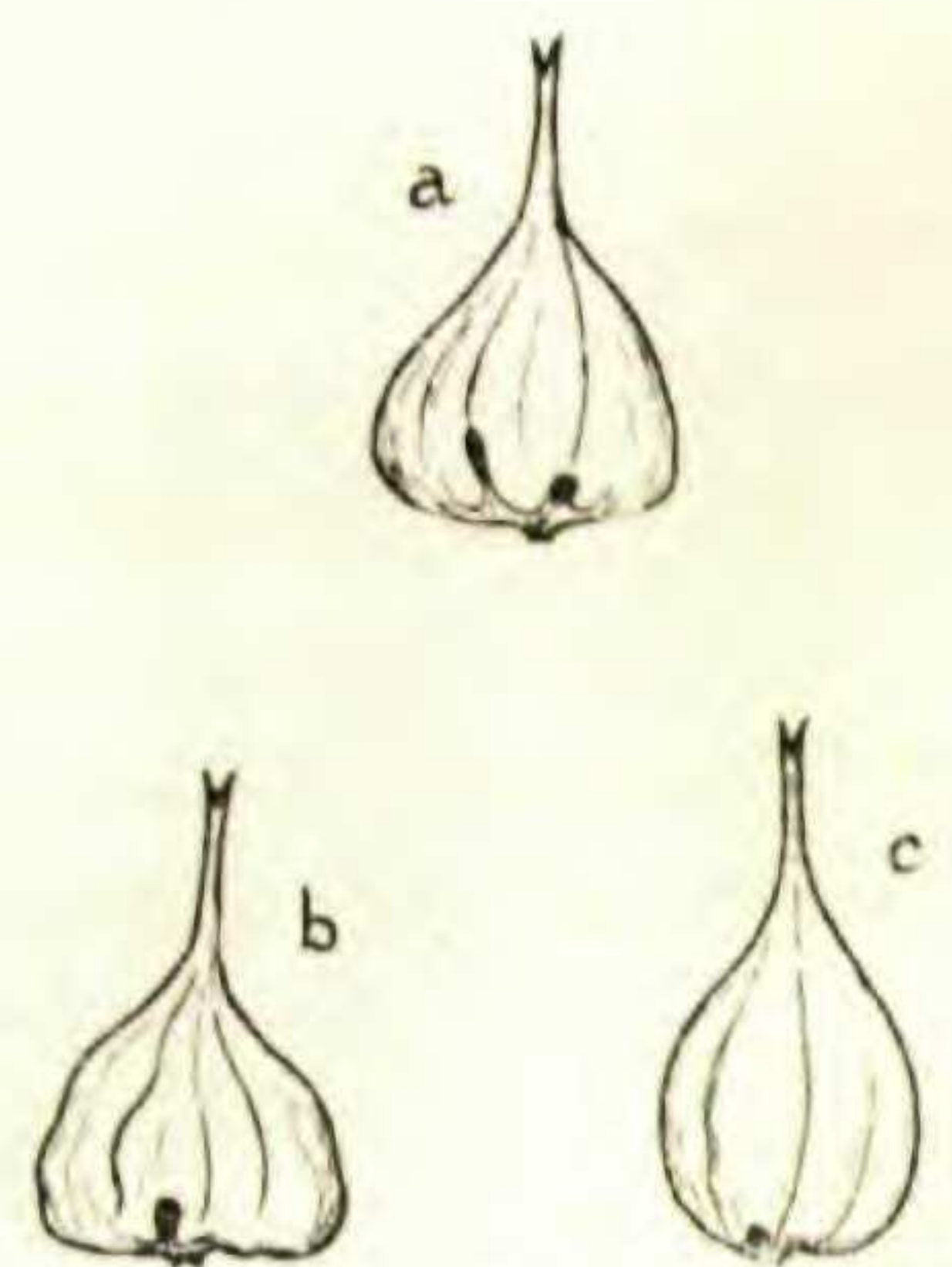


Fig. 2. Perigynia $\times 2$ a & b. *C. Tuckermani niagarensis*. c. *C. Tuckermani* (typical form).

of "bogs and meadows" (Britton & Brown), and of "rich alluvial shores, rarely in swamps" (Grays Manual, 7th ed.). The var. *niagarensis*, where observed by me, was a resident of level, poorly-drained, open woodland and thickets, confined to edges of vernal pools and depressions where moisture lingers well into the hot days of summer, but where the surface soil-layers dry out and crack before the akenes are mature.

My drawings are from specimens preserved unpressed especially for this purpose, all from the type material of the variety herein described, excepting the perigynium marked "c," referred to above.

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THE NAME OF THE HEMLOCK SPRUCE.

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UNDER the title "The correct name of the hemlock spruce" an interesting article by Oliver A. Farwell appeared in the December number of the Bulletin of the Torrey Botanical Club (Vol. XLI, 621–629). As I cannot agree with some of the statements made by the author and particularly with his conclusion that the correct name of the Hemlock Spruce ought to be *Tsuga americana*, I venture the following remarks to show that the name *Tsuga canadensis* for this tree should be retained.

In fixing the type of *Pinus canadensis* Linnaeus (*Spec. Ed.* 2, 1421) one has to consider that the diagnostic phrase is taken nearly literally from the synonym of Gronovius. This shows as clearly, as if Linnaeus had expressly designated the Gronovian plant as the type of his species, that his *Pinus canadensis* is based primarily on the plant described by Gronovius; that this is the Hemlock Spruce there can be no doubt, as Farwell himself admits. To Farwell's further deductions, however, I cannot subscribe; he says: "If we take the first synonym enumerated under a species in case no type is specifically named, then *Pinus canadensis* becomes a pure synonym of *Pinus balsamea* Linnaeus, for the first synonym cited under both species is the same Gronovian